

XV. *A Catalogue of Spiders either not previously recorded or little known as indigenous to Great Britain, with Remarks on their Habits and Economy.*
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Read April 5th, and April 19th, 1842.

WITH a few exceptions, of sufficient importance to warrant their introduction, the spiders comprised in the following catalogue have never before been recognised as British species. In addition to any interest which may be derived from this circumstance, numerous facts have been supplied relative to their structure, instincts, economy, and haunts, with occasional remarks upon their nomenclature and systematic arrangement.

The kind assistance received from the cooperation of friends in collecting materials for this paper, I have endeavoured to acknowledge in an appropriate manner as suitable occasions presented themselves; but as the information communicated in it has resulted, for the most part, from my own researches, I must be considered responsible for its accuracy.

Should the observations recorded in these pages contribute in any degree to facilitate the acquisition of that desideratum in the zoology of Great Britain, a comprehensive history of our native spiders adapted to the present state of arachnological science, the principal purpose which they were intended to subserve will be accomplished.

Class ARACHNIDA.

Order ARANEIDEA.

Tribe OCTONOCULINA.

Family DRASSIDÆ.

Genus DRASSUS, *Walck.*

1. DRASSUS SERICEUS.

Drassus sericeus. Walck. Hist. Nat. des Insect. Apt., t. i. p. 619. Koch, Die

Arachn. (Fortsetzung des Hahn'schen Werkes), b. vi. p. 37. tab. exc. fig. 457, 458.

In external structure this species makes a near approximation to *Drassus ater*. It frequents houses, especially such as are old, is a strong active spider, running with facility up smooth perpendicular surfaces by means of the adhesive matter emitted from the numerous papillæ of its climbing apparatus, and is decidedly nocturnal. I have met with it in several of the northern counties of England and Wales.

The papillæ or spinning-tubes connected with the terminal joint of each inferior mammula of *Drassus sericeus*, not only vary in number with the age of the animal, the full complement being nine large and two small ones, but a like number does not constantly occur on both mammulæ of the same individual, ten or eleven being sometimes observed on one, when nine or ten only are perceived on the other; coinciding in these particulars of their development with that of the papillæ with which the inferior mammulæ of *Drassus ater* and *Drassus cupreus* are provided. Since the publication of my observations on the spinning organs of spiders in the Linnean Transactions (vol. xviii. p. 219.), I have discovered that even adult specimens of *Drassus cupreus* and *Drassus sericeus* have not uniformly the same number of papillæ on the inferior spinners, and that the same individuals of both species, though capable of reproducing their kind, sometimes have one mammula more amply supplied with papillæ than the other, but that the two minute papillæ connected with each inferior mammula are present invariably. It is probable that the large papillæ are used by these spiders and by *Drassus ater* chiefly in constructing their cocoons, whose remarkably compact texture is best explained on the supposition that a copious supply of viscous matter in a state of fluidity is employed in their fabrication.

2. *DRASSUS ATER*.

Drassus ater. Walck. Hist. Nat. des Insect. Apt. t. i. p. 618. Latr. Genera Crust. et Insect. t. i. p. 87.

Melanophora atra. Koch, Die Arachn. b. vi. p. 88. tab. cci. fig. 493.

This species is common in Denbighshire and Caernarvonshire, occurring in crevices and under detached pieces of rocks. In the month of May the female deposits 40 or 50 white spherical eggs, not agglutinated together, in a cocoon

of a plano-convex figure, attached to the under side of stones by its plane surface; it is of a fine but very compact texture, and measures $\frac{2}{3}$ ths of an inch in diameter: when newly constructed it is white, but becomes reddish before it is abandoned by the young, which, at that early period of their existence, have each inferior mammula provided with two large and two small papillæ. The female usually remains upon or near the cocoon, to which she is strongly attached.

Genus CLUBIONA, Latr.

3. CLUBIONA EPIMELAS.

Clubiona epimelas. Walck. Hist. Nat. des Insect. Apt. t. i. p. 592.

Crevice in stone walls, and the under side of fallen leaves, are favourite haunts of *Clubiona epimelas*, which is found, though rarely, in the wooded districts of Denbighshire. The male has the palpal organs completely developed in June. In July the female constructs a plano-convex cocoon of white silk, of a compact but very fine texture, measuring $\frac{3}{10}$ ths of an inch in diameter, in which she deposits about 150 spherical eggs of a pale yellowish white colour, not agglutinated together. The cocoon is attached by its plane surface to the under side of stones, and is enclosed in a sac of fine white silk, which also includes the female.

4. CLUBIONA ACCENTUATA.

Clubiona accentuata. Walck. Hist. Nat. des Insect. Apt. t. i. p. 594.

Clubiona punctata. Hahn, Die Arachn. b. ii. p. 8. tab. xxxix. fig. 99.

This active spider occurs on trees in the woods of Denbighshire and Caernarvonshire, concealing itself among the liverworts and lichens growing on their trunks and branches.

5. CLUBIONA ERRATICA.

Clubiona erratica. Walck. Hist. Nat. des Insect. Apt. t. i. p. 602.

Cheiracanthium Carnifex. Koch, Die Arachn. b. vi. p. 14. tab. clxxxiv. fig. 438, 439.

Specimens of this handsome species have frequently come under my observation when exploring the woods and commons of Denbighshire. In July the female constructs a cell of white silk, of a fine compact texture, among the stems

of gorse and heath, the leaves of plants, &c., which she curves about it and secures in that position by means of silken lines. In this cell she deposits about 140 spherical eggs of a deep yellow colour, which are not agglutinated together, but are contained in an exceedingly delicate tissue of white silk of a subglobose form, measuring $\frac{1}{4}$ th of an inch in diameter, which is attached to the surface of the cell. The female appears to remain constantly near her eggs, not even quitting the cell to procure food.

Genus ARGYRONETA, Latr.

6. ARGYRONETA AQUATICA.

Argyroneta aquatica. Walck. Tabl. des Aran. p. 84. Latr. Genera Crust. et Insect. t. i. p. 94. Hahn, Die Arachn. b. ii. p. 33. tab. xlix. fig. 118. Koch, Die Arachn. b. viii. p. 60. tab. cclxix. fig. 636.

I have been favoured with specimens of *Argyroneta aquatica*, from the fens of Cambridgeshire, by Charles C. Babington, Esq., M.A., of St. John's College, Cambridge; and Thomas Glover, Esq., of Smedley Hill, near Manchester, has informed me that he has captured this species in small pools in Cheshire.

Family CINIFLONIDÆ.

Genus CINIFLO, Blackw.

7. CINIFLO FEROX.

Clubiona ferox. Walck. Hist. Nat. des Insect. Apt. t. i. p. 606. 1830
Amaurobius ferox. Koch, Die Arachn. b. vi. p. 41. tab. cxc. fig. 460, 461.

Having recently ascertained that this spider has eight spinners, and has the metatarsal joint of each posterior leg provided with a calanistrum, I no longer hesitate to transfer it from the genera *Clubiona* and *Amaurobius*, in which it has previously occupied a place, to the genus *Ciniflo*. Abounding in England and Wales, and frequenting the same localities as *Ciniflo atrox*, which it closely resembles in form, colour and economy, it is, notwithstanding its superior size, very generally confounded with that species.

GENUS *ERGATIS*, *Blackw.*

8. *ERGATIS LATENS*.

Ergatis latens. Blackw. Linn. Trans. vol. xviii. p. 608.

Dictyna latens. Koch, Die Arachn. b. iii. p. 29. tab. lxxxiii. fig. 186. Lister, De Aran. p. 56. tit. xvi. fig. 16.

M. Walckenaër has confounded *Ergatis latens* with *Theridion denticulatum*, from which it differs essentially in colour, organization and economy, and has given references to Lister's description and figure of the former species among the synonyma of the latter. (Tabl. des Aran. p. 74.) The same distinguished arachnologist has placed *Ergatis viridissima*, Blackw., which is closely allied to *Ergatis latens*, in the genus *Drassus* (Hist. Nat. des Insect. Apt. t. i. p. 631), evincing by these incongruities the difficulty experienced in attempting to classify the *Ciniflonidæ* before the discovery of the remarkable characters upon which that family is founded.

Ergatis latens spins a whitish web of an irregular structure at the extremities of the stems of gorse, heath, &c., growing on commons in Denbighshire. The sexes pair in June, and in July the female constructs several contiguous, lenticular cocoons of greenish white silk of a compact texture, which she attaches to the stem surrounded by her web, distributing about them the refuse of her prey; each contains from 10 to 16 spherical eggs of a yellow colour, which are not agglutinated together.

FAMILY AGELENIDÆ.

GENUS *TEGENARIA*, *Walck.*

9. *TEGENARIA DOMESTICA*.

Tegenaria domestica. Walck. Aranéides de France (dans la Faune Française), p. 205. Koch, Die Arachn. b. viii. p. 25. tab. cclx. fig. 607, 608.

Aranea domestica. Latr. Genera Crust. et Insect. t. i. p. 96.

I have received specimens of *Tegenaria domestica* from the Universities of Oxford and Cambridge, but I never have met with it in the north of England and Wales. *Tegenaria civilis* is very frequently mistaken for *Tegenaria domes-*

tica, and references to Lister's description and figure of the former species (De Aran. p. 59. tit. xvii. fig. 17.) have been repeatedly included among the synonyma of the latter by arachnologists of the highest authority.

Family LYCOSIDÆ.

Genus LYCOSA, Latr.

10. LYCOSA ANDRENIVORA.

Lycosa andrenivora. Walck. Hist. Nat. des Insect. Apt. t. i. p. 315.

This spider frequents commons and old pastures in various parts of England and Wales.

11. LYCOSA AGRETYCA.

Lycosa agretyca. Walck. Hist. Nat. des Insect. Apt. t. i. p. 308.

Lycosa ruricola. Hahn, Die Arachn. b. i. p. 103. tab. xxvi. fig. 77.

Lycosa agretyca occurs in old pastures in England and Wales. In the month of June the female excavates an elliptical cavity in the earth beneath stones, into which she retires with her cocoon, which is globular, composed of fine white silk of a compact texture, and is encircled by a narrow zone of a slighter fabric; it measures $\frac{1}{4}$ th of an inch in diameter, and contains about 110 spherical eggs of a pale yellow colour, not agglutinated together. The cocoon is attached to the spinners of the female by short lines of silk, and the young, when they quit it, mount on her body and are supplied by her with food. This species frequently passes the winter in the cavities which it forms in the earth under stones.

12. LYCOSA ALLODROMA.

Lycosa allodroma. Walck. Hist. Nat. des Insect. Apt. t. i. p. 330. Koch, Die Arachn. b. v. p. 106. tab. clxxii. fig. 410, 411.

In the spring of 1836 I discovered a light-coloured variety of this fine spider among water-worn stones and fragments of rock on the banks of the river Llugwy, near Capel Curig, Caernarvonshire; and, supposing it to be unknown to arachnologists, I described it under the appellation *Lycosa leucophæa* in the 'London and Edinburgh Phil. Mag.' vol. x. p. 104.

13. *LYCOSA PICTA*.

Lycosa picta. Hahn, Die Arachn. b. i. p. 106. tab. xxvii. fig. 79.

M. Walckenaër, regarding this handsome spider as identical with *Lycosa allodroma*, has placed the name given to it by Hahn among the synonyma of that species (Hist. Nat. des Insect. Apt. t. i. p. 330.). Of the specific distinctness of *Lycosa picta*, however, no doubt can be entertained by those observers who have had an opportunity of inspecting adult individuals. It is found in Cheshire and Denbighshire, frequenting sandy districts on the sea coast.

14. *LYCOSA LUGUBRIS*.

Lycosa lugubris. Walck. Hist. Nat. des Insect. Apt. t. i. p. 329.

Lycosa sylvicultrix. Koch, Die Arachn. b. iii. p. 25. tab. lxxxii. fig. 182, 183.

The description of *Lycosa lugubris* given by M. Walckenaër is applicable to the male only, which differs greatly from the female in size and colour. Among the synonyma of this species he has included the *Lycosa meridiana* of Hahn (Die Arachn. b. i. p. 20. tab. v. fig. 16.), a spider decidedly superior to it in size and unlike it in colour, and has placed the *Lycosa sylvicultrix* of Koch, which is identical with *Lycosa lugubris*, among the synonyma of *Lycosa vorax* (Hist. Nat. des Insect. Apt. t. i. p. 313).

Lycosa lugubris abounds in the woods of Denbighshire and Caernarvonshire; the sexes pair in April and May, and in the latter month the female deposits about 50 spherical eggs of a pale yellow colour, not agglutinated together, in a cocoon of a lenticular form and compact texture, composed of silk of a dull greenish or yellowish-brown colour, and measuring $\frac{1}{5}$ th of an inch in diameter; it is encircled by a whitish zone of a slight texture, and is attached to the spinners of the female. When the young quit the cocoon they pass through an opening which takes place in the zone and ascend the body of the mother.

15. *LYCOSA PALLIDA*.

Lycosa pallida. Walck. Hist. Nat. des Insect. Apt. t. i. p. 334.

This spider is of frequent occurrence on the banks of rivers in Denbighshire and Caernarvonshire; it pairs in May, in which month and in June the female deposits about 60 pale yellow eggs of a spherical figure, not agglutinated to-

gether, in a lenticular cocoon of dull green or yellowish-brown silk, of a compact texture, measuring $\frac{1}{5}$ th of an inch in diameter, on quitting which the young mount on the body of the mother.

Like other species belonging to the same genus, *Lycosa pullida*, in constructing its cocoon, slightly connects the margins of the two compact portions, beneath which the thin fabric of the zone is folded. This simple contrivance affords an admirable provision for the development of the young in the foetal state by an increase in the capacity of the cocoon consequent on the margins of the compact parts becoming detached by means of the expansive force within, the eventual liberation of the young being effected by the rupture of the zone, which is the weakest part. This interesting fact in the economy of the *Lycosæ* appears to have escaped the observation of arachnologists.

16. *LYCOSA PIRATICA*.

Lycosa piratica. Walck. Hist. Nat. des Insect. Apt. t. i. p. 339. Hahn, Die Arachn. b. i. p. 107. tab. xxvii. fig. 80.

Lycosa piratica frequents marshes and the margins of pools in England and Wales; it runs rapidly on the surface of water, even when encumbered with its cocoon, and frequently takes refuge from danger beneath the surface of that liquid, concealing itself among the leaves of aquatic plants, the air confined by the circumambient water among the hairs with which it is clothed enabling it to remain immersed for a considerable period of time. In June the female deposits from 80 to 100 spherical eggs of a deep yellow colour, not agglutinated together, in a globular cocoon of compact white silk, encircled by a narrow zone of a slighter texture; it measures about $\frac{1}{5}$ th of an inch in diameter, and the young, when extricated from it, climb upon the body of the mother.

Genus *DOLOMEDES*, Latr.

17. *DOLOMEDES FIMBRIATUS*.

Dolomedes fimbriatus. Walck. Hist. Nat. des Insect. Apt. t. i. p. 345. Hahn, Die Arachn. b. i. p. 14. tab. iv. fig. 10.

Dolomedes limbatus. Hahn, Die Arachn. b. i. p. 15. tab. iv. fig. 11.

Dolomedes marginatus. Hahn, Die Arachn. b. i. p. 15. tab. iv. fig. 12.

I am indebted to C. C. Babington, Esq., for specimens of this fine spider, which is found in the fens of Cambridgeshire. Like *Lycosa piratica* and *Argyroneta aquatica*, it descends spontaneously beneath the surface of water, the period of time during which it can respire when immersed depending upon the supply of air enveloping its body. In May the female deposits several hundred eggs in a globular cocoon of brown silk, of a compact texture, measuring $\frac{3}{5}$ ths of an inch in diameter, which she carries under the sternum, supporting it in that situation by means of the mandibles and palpi, additional aid being derived in all probability from silken lines connecting it with the spinners; a method which I have discovered that *Dolomedes mirabilis* constantly employs to retain its cocoon in a similar situation. This interesting fact supplies a new link in the chain of analogies which connects the genus *Dolomedes* with that of *Lycosa*.

Family SALTICIDÆ.

Genus SALTICUS, Latr.

18. SALTICUS CUPREUS.

Salticus cupreus. Hahn, Die Arachn. b. ii. p. 42. tab. lv. fig. 128.

Salticus æneus. Hahn, Die Arachn. b. i. p. 65. tab. xvii. fig. 49.

Salticus flavipes. Hahn, Die Arachn. b. i. p. 66. tab. xvii. fig. 50.

Attus cupreus. Walck. Hist. Nat. des Insect. Apt. t. i. p. 409.

Crevices among detached pieces of rock accumulated in heaps are the favourite haunts of this species, which occurs in woods growing in the mountainous parts of Denbighshire and Caernarvonshire. In June the female encloses herself in a cell of beautifully white silk, of a compact texture, on the exterior surface of which particles of soil, withered moss, and other materials are sometimes sparingly distributed; she usually attaches it to the under side of stones or dead leaves, depositing in it from 20 to 30 spherical eggs of a pale yellow colour, which are connected by fine lines of silk.

19. SALTICUS CORONATUS.

Attus coronatus. Walck. Hist. Nat. des Insect. Apt. t. i. p. 412.

Salticus Blancardii. Hahn, Die Arachn. b. i. p. 64. tab. xvi. fig. 48.

This is a common spider in the woods of Denbighshire and Caernarvonshire.

20. *SALTICUS GRACILIS*.

Salticus gracilis. Hahn, Die Arachn. b. i. p. 73. tab. xviii. fig. 55.

Attus gracilis. Walck. Hist. Nat. des Insect. Apt. t. i. p. 423.

The only locality in which I have met with *Salticus gracilis* is Gwydir woods in Caernarvonshire.

Family THOMISIDÆ.

Genus THOMISUS, *Walck.*

21. THOMISUS BREVIPES.

Thomisus brevipēs. Hahn, Die Arachn. b. i. p. 30. tab. viii. fig. 25. Walck. Hist. Nat. des Insect. Apt. t. i. p. 503.

I have found one or two adult females of this species under stones in fields adjacent to woods at Oakland, near Llanrwst, Denbighshire. The only male I ever captured resembled the female in colour; but, though the terminal joints of its palpi were very tumid, the palpal organs were not developed, proving that it had not attained maturity.

22. THOMISUS BIFASCIATUS.

Xysticus bifasciatus. Koch, Die Arachn. b. iv. p. 59. tab. cxxv. fig. 286, 287, 288.

As there does not appear to be the least necessity for following Koch's example in separating this spider from the *Thomisi*, I have retained it among them.

Adult males may be seen occasionally in July and August running on the ground in pastures near Llanrwst.

23. THOMISUS CITREUS.

Thomisus citreus. Walck. Hist. Nat. des Insect. Apt. t. i. p. 526. Latr. Genera Crust. et Insect. t. i. p. 111. Hahn, Die Arachn. b. i. p. 42. tab. xi. fig. 32.

Thomisus pratensis. Hahn, Die Arachn. b. i. p. 43. tab. xi. fig. 33.

Thomisus Dauci. Hahn, Die Arachn. b. i. p. 33. tab. ix. fig. 27.

Thomisus calycinus. Koch, Die Arachn. b. iv. p. 53. tab. cxxiv. fig. 283, 284.

Flowers growing in fields and gardens are the favourite resorts of *Thomisus citreus*, which occurs in the western parts of Denbighshire.

Genus PHILODROMUS, *Walck.*

24. PHILODROMUS DISPAR.

Philodromus dispar. Walck. Hist. Nat. des Insect. Apt. t. i. p. 553.

The sexes of this active spider, which is found in the wooded parts of Denbighshire and Caernarvonshire, differ greatly in colour.

25. PHILODROMUS CESPITICOLENS.

Philodromus cespiticolens. Walck. Hist. Nat. des Insect. Apt. t. i. p. 555.

This species occurs in woods in Denbighshire. In July the female fabricates a cell of compact white silk among the leaves growing near the extremities of the stems of shrubs, curving them about it and retaining them in that position by means of silken lines. In this cell, which she usually occupies, she constructs two lenticular cocoons of white silk, of a delicate texture, depositing in each from 40 to 100 spherical eggs of a pale yellow colour. The cocoons frequently differ considerably in size, the larger one measuring about $\frac{1}{4}$ th of an inch in diameter.

26. PHILODROMUS OBLONGUS.

Philodromus oblongus. Walck. Hist. Nat. des Insect. Apt. t. i. p. 558.

Thomisus oblongus. Latr. Genera Crust. et Insect. t. i. p. 112. Hahn, Die Arachn. b. i. p. 110. tab. xxviii. fig. 82.

I have received *Philodromus oblongus* among spiders sent to me from the north of Cheshire.

Genus SPARASSUS, *Walck.*

27. SPARASSUS SMARAGDULUS.

Sparassus smaragdulus. Walck. Hist. Nat. des Insect. Apt. t. i. p. 582.

Micrommata smaragdina. Latr. Genera Crust. et Insect. t. i. p. 115. Hahn, Die Arachn. b. i. p. 119. tab. xxxiii. fig. 89 A. B.

A collection of spiders captured in various parts of England by C. C. Babington, Esq., and obligingly transmitted by him to me in the year 1840, contained an adult male of this species; and T. Glover, Esq., has taken *Sparassus smaragdulus*, in an immature state, in the woods at Tan y Bwlch in Merionethshire.

Family THERIDIIDÆ.

Genus THERIDION, *Walck.*

28. THERIDION DENTICULATUM.

Theridion denticulatum. Walck. Tabl. des Aran. p. 74.

Crevices in rocks and walls, and the branches of trees growing against buildings, are the usual haunts of this species, which is common in England and Wales.

29. THERIDION SIGNATUM.

Theridion signatum. Walck. Tabl. des Aran. p. 76.

Asagena serratipes. Koch, Die Arachn. b. vi. p. 98. tab. cciv. fig. 502, 503.

M. Koch, without any apparent reason, has transferred *Theridion signatum* from the family *Theridiidæ* to that of *Ageleuidæ*. (Uebersicht des Arachn. Syst. p. 13.)

This remarkable species is found among heath in Denbighshire, but is of rare occurrence. The fourth and fifth palpal joints of the male are so closely connected, as scarcely to present any perceptible trace of their union; indeed, as they appear to be quite incapable of separate motion, there seems to be an impropriety in regarding them as distinct joints.

Genus NERIËNE, *Blackw.*

30. NERIËNE TRILINEATA.

Theridion reticulatum. Hahn, Die Arachn. b. ii. p. 39. tab. liv. fig. 124.

Bolyphantes trilineatus. Koch, Die Arachn. b. viii. p. 67. tab. cclxxii. fig. 641.

This spider, which belongs to the genus *Neriëne*, is found under stones in the neighbourhood of Manchester. Koch, perceiving that it and some nearly allied species differed essentially from the true *Theridia*, has proposed the genus *Bolyphantes* for their reception.

31. NERIËNE GRAMINICOLENS.

With the exception of the legs and palpi, which are of a uniform colour, without any dark annuli, *Neriëne graminicolens* so closely resembles *Neriëne trilineata*, as scarcely to be distinguished from it; but as this difference is constant in all stages of the growth of these spiders, I am disposed to regard them as specifically distinct.

Neriëne graminicolens occurs among long grass and coarse herbage growing at the roots of trees in old pastures at Oakland, and the male has the palpal organs and the metatarsal joint of the anterior legs completely developed in autumn. The contraction and expansion of the dorsal vessel are very apparent in this species, but the number of pulsations in a minute varies with the temperature of the atmosphere by which it is surrounded.

Genus MANDUCULUS, *Blackw.*

32. MANDUCULUS VERNALIS.

Theridion vernale. Hahn, Die Arachn. b. ii. p. 38. tab. liii. fig. 123.

In autumn, this spider, which belongs to the genus *Manduculus*, may be seen running on the ground in pastures in various parts of Lancashire and Denbighshire, and specimens of it were comprised in the collection of spiders received from C. C. Babington, Esq., in 1840.

Genus PHOLCUS, *Walck.*

33. PHOLCUS PHALANGIOIDES.

Pholcus phalangioides. Walek. Tabl. des Aran. p. 80. Latr. Genera Crust. et Insect. t. i. p. 99. Hahn, Die Arachn. b. ii. p. 34. tab. l. fig. 119.

My friend Richard Potter, Esq., M.A., of Queen's College, Cambridge, and Professor of Natural Philosophy in University College, London, brought me living specimens of *Pholcus phalangioides* from Barmouth in Merionethshire, where he captured them in the summer of 1835. In 1836 I received an adult male from T. Glover, Esq., which he had taken in Liverpool, and I have in my possession an immature individual from the Isle of Wight.

Genus LINYPHIA, Latr.

34. LINYPHIA PALLIDA.

Theridion pallidum. Koch, Die Arachn. b. iii. p. 64. tab. xciv. fig. 216.

M. Koch has placed this spider among the *Theridia*; but it is evident, from the structure of its maxillæ and legs, the disposition of its eyes, and its general economy, that it belongs to the genus *Linyphia*. In autumn it spins among grass growing in the grounds about Oakland a horizontal sheet of web, supported by fine lines united to its upper surface and to each other at various angles, and attached to objects situated above it. Like its congeners, it takes its station on the under side of the web in an inverted position, and there watches for its prey.

Family EPEÏRIDÆ.

Genus EPEÏRA, Walck.

35. EPEÏRA BICORNIS.

Epeïra bicornis. Walck. Tabl. des Aran. p. 57.

This species is found on the trunks of trees growing in the wooded parts of Denbighshire. In July the female constructs a subglobular cocoon of light brown silk, of a loose texture, measuring about $\frac{1}{3}$ rd of an inch in diameter, in which the eggs are deposited.

36. EPEÏRA AGALENA.

Epeïra agalena. Walck. Tabl. des Aran. p. 59. Hahn, Die Arachn. b. ii. p. 29. tab. xlvii. fig. 115.

Epeïra agalena fabricates a geometric net of moderate dimensions, not open at the centre, among coarse plants and low bushes growing in pastures near Llanrwst. It does not appear to spin a cell, but usually takes its station on objects contiguous to its snare. In June the female constructs a subglobular cocoon of yellowish brown silk of a loose texture, about half an inch in diameter, in which she deposits 140 or 150 dark brown spherical eggs, agglutinated together in a globular mass measuring $\frac{1}{5}$ th of an inch in diameter.

37. *EPEÏRA SCALARIS.*

Epeïra scalaris. Walck. Tabl. des Aran. p. 60. Hahn, Die Arachn. b. ii. p. 27. tab. xlvii. fig. 114.

This handsome spider is found in the neighbourhood of London.

38. *EPEÏRA UMBRATICA.*

Epeïra umbratica. Walck. Tabl. des Aran. p. 61. Hahn, Die Arachn. b. ii. p. 24. tab. xlv. fig. 112.

Epeïra umbraticola. Latr. Génera Crust. et Insect. t. i. p. 105. Lister, De Aran. p. 44. tit. ix. fig. 9.

Our celebrated countryman, Dr. Lister, has described this species with his accustomed accuracy; but, as neither Walckenaër nor Latreille appears to have referred to his account of it, I am induced to include it in this catalogue.

Epeïra umbratica is much more abundant in various parts of England and Wales than it is generally supposed to be; its apparent scarcity being attributable to its nocturnal habits and the care with which it conceals itself during the day.

In June the female constructs, under the exfoliating bark of trees and in crevices in old rails, a subglobular cocoon of white silk, of a slightish texture, measuring about $\frac{2}{5}$ ths of an inch in diameter, in which she deposits between 100 and 200 spherical eggs of a yellowish brown colour, agglutinated together. On the exterior surface of this cocoon, small pieces of bark, wood and other extraneous materials are usually distributed, which serve to assimilate it to surrounding objects.

39. *EPEÏRA FUSCA.*

Epeïra fusca. Walck. Tabl. des Aran. p. 63.

Epeïra Menardi. Latr. Genera Crust. et Insect. t. i. p. 108.

Meta fusca. Koch, Die Arachn. b. viii. p. 118. tab. cclxxxv. fig. 685, 686, 687.

In removing *Epeïra fusca* from the *Epeïridæ*, and placing it among the *Theridiidæ* (Uebersicht des Arachn. Syst. p. 7), Koch appears to have lost sight of those principles of affinity and analogy which afford the only safe guide in the classification of natural objects.

Caves, cellars, overhanging banks and other obscure places constitute the principal haunts of this spider in Denbighshire and Caernarvonshire. In autumn the female fabricates a large oviform cocoon of white silk, of so delicate a texture, that the eggs, connected together by fine silken lines in a globular mass measuring $\frac{1}{4}$ th of an inch in diameter, may be distinctly seen within it. Its transverse axis measures about $\frac{1\frac{1}{10}}{10}$ ths and its conjugate axis $\frac{8}{10}$ ths of an inch, and it is generally attached by numerous lines, forming a short pedicle at one extremity, to the vaults and walls of caves, cellars, &c. The eggs, which are yellow and spherical, are between 400 and 500 in number.

40. *EPEÏRA ANTRIADA*.

Epeïra antriada. Walck. Tabl. des Aran. p. 62.

Epeïra antriada is common in obscure, damp situations in the north of England and Wales. Like *Epeïra inclinata*, it generally spins its net in an inclined position, leaving an open circular space at the centre, which it frequently occupies when watching for its prey; from this station it drops quickly to the ground on being disturbed, regaining it, when the danger is past, by means of a line drawn from the spinners in its descent. It has the habit of extending the first and second pairs of legs in a line with the body in the manner of *Tetragnatha extensa*.

Tribe SENOCULINA.

Family DYSDERIDÆ.

Genus DYSDERA, Latr.

41. *DYSDERA ERYTHRINA*.

Dysdera erythrina. Walck. Hist. Nat. des Insect. Apt. t. i. p. 261. Latr. Genera Crust. et Insect. t. i. p. 90. Koch, Die Arachn. b. v. p. 76. tab. clxv. fig. 389.

Specimens of this spider have been captured in central parts of the town of Manchester, and in the summer of 1835, R. Potter, Esq., sent me an adult female from Cambridge.

42. *DYSDERA RUBICUNDA.*

Dysdera rubicunda. Koch, Dic Arachn. b. v. p. 79. tab. clxv. fig. 390, 391.

The only individual of this species which has come under my observation, was an adult male, contained in the collection of spiders sent to me from Cambridge by C. C. Babington, Esq., to whose liberality this interesting addition to the Fauna of Great Britain is due.

43. *DYSDERA HOMBERGII.*

Dysdera Hombergii. Walck. Hist. Nat. des Insect. Apt. t. i. p. 263.

Distinguished arachnologists have mistaken *Dysdera Hombergii*, first briefly described by Scopoli (Entomologia Carniolica, p. 403. no. 1119.), for the young of *Dysdera erythrina*, from which it differs in colour and organisation. Being convinced of its specific distinctness by a careful examination of specimens captured in 1832, in the same year I gave a description of it in the 'London and Edinburgh Phil. Mag.' vol. i. p. 190, under the appellation of *Dysdera Latreillii*, but the trivial name, of course, is superseded by that originally given to it by Scopoli.

Crevice in rocks and walls, and the under side of lichens and liverworts growing on trees, are the favourite resorts of *Dysdera Hombergii*, which is plentiful in the wooded districts of Denbighshire and Caernarvonshire. The sexes pair in May, and in the succeeding month the female envelops herself in an oval cell of white silk, of a slight texture, on whose exterior surface are disposed minute pebbles, small pieces of indurated soil, and other heterogeneous materials; in this cell she deposits between 20 and 30 spherical eggs of a pale pink colour, which are not agglutinated together.

Genus *OONOPS*, *Templeton.*

44. *OONOPS PULCHER.*

Oonops pulcher. Templeton, Zoological Journal, vol. v. p. 404. pl. xvii. fig. 10.

In the 'London and Edinburgh Phil. Mag.' vol. x. p. 100, I proposed the genus *Deletrix* for the reception of this minute spider, which I described under the specific name *exilis* from immature females whose colours had been in-

jured by captivity. At that time I was not aware that I had been anticipated by Mr. Templeton, whose genus *Oonops*, founded on the organic peculiarities of this species, has the claim of priority.

Oonops pulcher is found in crevices in rocks and stone walls, and among liverworts growing on trees in Lancashire, Denbighshire and Caernarvonshire, being abundant in the last two counties. In May the female fabricates near her retreat several contiguous, subglobose cocoons of white silk, of a delicate but compact texture, measuring about $\frac{1}{16}$ th of an inch in diameter, in each of which she usually deposits two spherical pink eggs, not agglutinated together.